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ABSTRACT

This paper proposes system supports to improve the post-school status of mildly disabled special education students and recommends that such supports be a focus of research supported by the federal Office of Special Education and Rehabilitation Services. Each service is discussed in terms of its rationale, possible content, process measures, immediate outcome measures, longterm outcome measures, and a time frame for effectiveness research. The use of functional educational outcome measures focusing on postsecondary employment or enrollment status and on general quality of life is recommended. Proposed system supports include: (1) inschool case managers; (2) health services; (3) counseling/treatment programs; (4) extended week/year programs; (5) mentors/benefactors; (6) family support programs; (7) options for out-of-family living; (8) multicultural orientation; (9) placement services; and (10) overall case management. Guidelines are given for documenting the impact of interventions which focus on population characteristics and treatment specifics as well as for statistical analysis by nontraditional techniques. Other guidelines address 3-year and 6-year projects, required resources, and major challenges and limitations (such as limited national resources, the growing underclass, and professional turf issues). (81 references) (DB)

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RESEARCH STRATEGIES TO IMPROVE THE OUTCOME OF SECONDARY SPECIAL EDUCATION PROGRAMS FOR MILDLY HANDICAPPED STUDENTS: **SYSTEM SUPPORT STRATEGIES**

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Introduction

The purpose of this manuscript is to propose system supports which may improve the post-school status of special education students, and methods of evaluating these services. A discussion of curriculum, instructional methodology, and the influence of skilled teachers is not within the scope of this paper. We believe that well designed and evaluated curricula, the use of powerful instructional procedures, and highly skilled, enthusiastic teachers are critical to a meaningful and effective education, and these are addressed in a companion paper. Certainly our proposals, implemented in the absence of high quality teachers and curricula, will have little chance for success. On the other hand, we believe even the best curricula and teachers will be undermined by the lack of necessary support systems.

The impact of poverty and other negative influences in students' environment has captured the attention of many researchers (Levin, 1986; Smith & Lincoln, 1988; Wehlage, 1986). It is fairly well documented that the characteristics of socio-economic status, ethnicity, family structure, and educational levels of the parents all correlate with school performance, rate of school completion, and post-school status. Zigmund (undated) and Wehlage (1986) have noted that while this line of correlational research has a noble intent -- to ensure that educational policy takes into consideration the characteristics of low-achieving students -- it has not been terribly fruitful because the student variables such as race and SES are fixed. Rather than study these unalterable characteristic, Zigmund and Wehlage

recommend the study of program characteristics which schools can modify, such as curriculum, and student schedules.

We are in basic agreement with Zigmund's proposals, and we are not recommending further correlational study on low achievers. However, we believe that SES, family intactness, and other innate characteristics are indicators for circumstances that are alterable. Thus, whereas the study of the impact of SES on achievement will probably not lead to useful interventions, the study of the health status of students and their access (or lack of access) to health care can generate findings on how to alter circumstances to improve student performance. Likewise, the information that students from single-parent families tend to be low achievers is not particularly useful information in itself, whereas information that the presence of an adult mentor benefits at-risk students has practical implications for program development. The focus then becomes the study of what institutional characteristics and strategies produce positive experiences for at-risk students (Wehlage, 1986).

Second-order teacher effects. Because competent teachers play an absolutely critical role in the educational process, we must continue to improve teacher training programs (including inservice training programs). Teacher motivation, however, is also necessary for the successful implementation of instructional strategies and innovative programs. Higher salaries, pleasant safe work environments, and active involvement in school policy and decision making have all been

identified as factors that influence teacher motivation. We believe that teachers' belief that they can (and do) make a difference in the lives of their students is an important motivation factor.

We have encountered numerous teachers who are overwhelmed by the out-of-school factors that interfere with student learning. Students who come to school fatigued, unhealthy, undernourished, under the influence of drugs, with family or peer problems, and without the expectation that school success will bring real life rewards, tend not to be active learners. Teachers feel impotent in their efforts to reach these students and alleviate these out-of-school factors. We believe our proposed support strategies will directly improve teacher motivation and morale. With these services in place, teachers need not feel responsible for addressing the myriad needs of their students; they can then focus on teaching because their students' more basic needs (Maslow, 1962) are being addressed. Just as students and parents need to be empowered if the educational process is to be effective, teachers also need to be empowered to provide all students with the academic and vocational skills that are the minimum requirements for adult success.

We propose to outline a number of support services we believe are critical for students with mild handicaps and which schools can implement or coordinate in order to help students derive maximum benefits from instructional experiences. We will provide a rationale for these services, briefly outline the possible content of these services, propose process measures, immediate outcome measures, long-

term outcome measures, and a time frame for conducting research on the effectiveness of these services.

Characteristics of Students with Mild Handicaps

Students with mild handicaps typically include those labeled as learning disabled, mildly mentally retarded, seriously behaviorally disordered, and health impaired (attention deficit disorders). These students are characterized by at or near general ability levels but with histories of low performance in basic academic skills. This group of students is overrepresented by males, ethnic minorities, and individuals with English as a second language. Students with these mild handicaps are also more likely to have learning problems associated with economic disadvantage.

Traditional special education for this group of secondary students has consisted of mainstreaming (with resource room support), self-contained programs that mirror the typical secondary (academic) curriculum, and less frequently, placement in regular vocational education or adapted vocational education programs.

Follow-up studies of these students have found: a) this group has the highest dropout rate among special education students; b) graduates experience marginal success in postsecondary education programs; c) both graduates and dropouts experience relatively low rates of employment; d) those employed have a low income level, few health care benefits, and jobs with little opportunity for advancement; e) the

incarceration rate for this group is higher than for nonhandicapped students and other special education students; f) general quality of life indicators (friendships, recreational opportunities, independent living) are lower for this group than their nonhandicapped peers, and; g) there are few adult services available for this group of school leavers.

Educational Outcomes

A decade of implementation of EHA has raised the question whether it works (Gartner & Lipsky, 1987; Singer & Butler, 1987), and what outcomes are the best indicators of its success. There is general agreement that access to special education services has been achieved, with less agreement on objective means of determining the success of these programs. Possible criteria for successful outcomes are: 1) completion of a secondary program and receipt of a diploma (or certificate); 2) attainment of a specified skill level as measured by an achievement test or by vocational skill assessments; 3) information on life status measures (employment, salary level, living situation, self report on satisfaction and/or amount of friends) that reflect a reasonable standard of life for both handicapped and nonhandicapped students who exit secondary programs.

We propose that measures of life status are the most meaningful indicators of the overall and long-term success of special education. Life status measures reflect the reality that adult services are not available for this group of students, and therefore mere measures of

skill acquisition (i.e., a diploma, test scores) are weak indices of a student's preparation for adult life. For the great majority of students with mild handicaps, public education (and in this case, special education) is the only social welfare program available to prepare them for adult life. As such, the outcome measures need to reflect adult adjustment.

Functional Outcome Measures

We propose studying two levels of outcomes for all school leavers with mild handicaps (i.e., graduates, dropouts, certificate recipients, age outs). Level I would measure current employment status or postsecondary enrollment. Level II would measure general quality of life. The desired outcome of special education would be either appropriate job placement or enrollment in a formal training or postsecondary program, and satisfaction of the student and parents regarding friendships, health status, and living situation.

Level I Measures

A. Placement in a postsecondary education or training program with documented entry skill levels, adequate support systems in place, and one quarter (semester) of successful performance.

or

B. Employment in a job with above-poverty level wages and health benefits for at least six months.

Level II Measures

Self reports by student and parent on: satisfaction with current status, amount/type of friends, living situation, and prospects for the future.

We have not failed to note that these proposals radically alter the role of education. Measuring actual placement rather than number of Carnegie units is a radical departure from current assessments of performance. We also acknowledge the absence of traditional skill level measures. Most importantly, we are aware of the potential policy issues that arise if placement is the desired outcome (i.e., which agencies should provide the various services, how should eligibility be determined for such services, how will the services be funded).

We acknowledge this proposal creates a discrepancy in the expectations for special education and regular education. Specifically, the outcomes we propose for special education are much more comprehensive than those expected for regular education. Some may ask why special education should be held accountable for standards higher than those of regular education (i.e., quality of life of graduates rather than simple graduation from high school). We in fact believe that both regular and special education should be evaluated on these new criteria. The fact that regular education does not use these criteria is not sufficient reason for special education not to do so. We believe that a substantial percentage of regular education students do not benefit from their schooling experience, and that our proposed

outcome criteria would document that they, too, fail to achieve a reasonable post-school status.

Public education in the United States is the major social institution that offers youth an opportunity to gain full status in our society. The dearth of adult services for mildly handicapped graduates means that those youth who do not acquire basic academic, social, and vocational skills in public school will undoubtedly flounder in the adult world. For all youth, but especially for those with disabilities, and particularly for those from families living in poverty, our public school system is the crucial entitlement. The rationale for attempting to increase the power of the schooling experience is the increasing numbers of young adults who leave school without the skills and support needed to be successful.

We believe there are ways to address these issues. A major change we introduce in our research proposal is the use of outcomes (i.e., actual placements and satisfaction) that are direct measures of quality of life rather than indicators (i.e., a diploma, credits earned). We believe the use of these measures can radically alter the form and function of the schooling experience, and can drive decisions concerning program modification. As we noted in our introduction, these recommendations are based on the assumptions of parallel changes in what and how students are taught. Without the addition of support services for students who need them, however, instructional improvements are not likely to be effective.

Support Systems for Students with Mild Handicaps

We preface the following discussion of supports by underscoring the need for curriculum changes. Regardless of the curriculum, however, mildly handicapped students (and to our way of thinking, many other students) need additional supports to benefit from instruction because they face obstacles that interfere with school. Students from disadvantaged or dysfunctional families, or those with emotional/behavioral problems simply cannot succeed in today's secondary programs. While it is not clear who should provide the needed supports -- the schools, the business community, church groups, youth organizations, social agencies -- there is no question that these supports are needed.

Chronic disease model. Kazdin (1987) has conceptualized conduct disorders in a manner that may be useful in this proposal. He suggests that we consider conduct disorders as a chronic condition, similar to diabetes, that requires on-going assessment, treatment, and evaluation to enable the individual to live a satisfactory life -- but the interventions do not cure the disease. If the intervention is interrupted, the disease (symptoms) interfere with life. To our way of thinking, many mildly handicapped individuals meet this description. Our recommendations reflect this model for treatment. Rather than expect our time-limited interventions to "fix" (cure) students, we may need to acknowledge that these individuals need ongoing supports throughout their lives, into adulthood, or until more effective interventions or service systems are developed.

Not all students with mild handicaps or from families in poverty are alike. Each student and his or her particular ecosystem needs to be viewed as an individual unit for analysis. While we can average data on typical needs, we can never forget the importance of individual analysis. Some students will need only a few additional supports, while others will need a complex web of support services. Our menu of support services was generated by reviewing aggregate needs. The refinement of these service domains, the establishment of the extent of these needs, and the documentation of the effectiveness of the proposed interventions await empirical research.

We propose the following student supports to prevent mildly handicapped and other students at risk from dropping out of school, and to benefit from their educational programs and achieve successful outcomes. These particular supports are proposed because they address what we regard as the most serious environmental threats to a student's educational success, and because there are preliminary data for most of these supports indicating their potential for successful replication. We believe these supports should be a focus of the research agenda of the Office of Special Education and Rehabilitation Services (OSERS). On reviewing OSERS-funded secondary projects over the past three years, we found only 1 of 76 projects which addressed student support needs (ERIC/OSEP, 1990). Studies should be funded on the impact of these student/family supports on students' postsecondary outcomes.

Implementation and evaluation procedures. For each of the proposed interventions we will briefly describe the service and supporting findings, procedures for determining student need for the service, immediate short-term measures of service effectiveness, and long-term outcome measures. The evaluation of these services would include the immediate outcomes, student satisfaction, completion of the school program, and eventual post-school placement (status). Short-term research (3 year programs) would be funded to demonstrate that the service is needed by some proportion of students, can be delivered, and succeeds in achieving the short-term objectives. Long-term research (6-8 year programs) would validate that the services were related to student retention, successful program completion (graduating), and achieving successful adult adaptation, including job retention, advancement, or job change.

In-School Case Managers

Service description. Every student should have access to one adult in the school system who is available for individual consultation on a regular basis. This individual would guide the student through the educational system, and would be an ally who cared about the student's progress. The need for this case manager stems from the fact that many of these students have no adult who can negotiate systems or plan the best possible use of available services and programs. The primary role of this individual is not to be a tutor or counselor, but to be a knowledgeable adult friend who cares that the student is in school and is interested in his or her daily progress. This would be a new role,

but could be filled by teachers, counselors, or administrative staff. Training and release time would be required for school staff who fill this role.

Determining student need. Although all students will probably not need this service, at least initially, all students should be assigned to a case manager. For students who are progressing satisfactorily, contacts with the case manager will be limited.

Short-term measures. These would include assignment of the case manager, frequency of contacts, and a student satisfaction measure. School attendance would be a short-term measure of all support services. Data on student knowledge of, access to, and utilization of programs and services would be collected.

Long-term measures. School completion and post-school placement will be long-term measures for all support services. Student ratings of the value of the case manager service would be collected at the end of the school program.

Health Services

Service description. Good health contributes to the adolescent student's overall energy, esteem, and motivation to learn. Yet increasing numbers of children lack access to health care; 18% of white children and 29% of African-American children in employed families are uninsured (Children's Defense Fund, 1989a). Poor adolescents with

disabilities are three times as likely to be uninsured as their nonpoor counterparts (Children's Defense Fund, 1989b). A comprehensive health insurance program has been proposed to improve the declining living standards of U.S. children (Wolfe, 1990). Another proposal for coverage for the uninsured is school-enrollment based family health insurance (Freedman, et al., 1988).

Good health for adolescents is determined by access to medical care, understanding of reproduction and birth control as well as physical fitness and nutritional habits. The U.S. teenage pregnancy rate is 2-7 times higher than rates of other developed countries with more advanced national policies on sex education and birth control (Jones, et al., 1986). The evidence, however, is that standard curricula on sex education and substance abuse are ineffective (Center for Population Options, 1984; Cuban, 1986; Dawson, 1986; Haffner, 1988; Kirby, 1984; Marsiglio & Mott, 1986; National Research Council, 1987). School-based comprehensive health clinics appear to be promising innovations for increasing student access to health care (Children's Defense Fund, 1986), with outcomes including reduced pregnancy rates, increased graduation rates by teenage mothers, increased information about AIDS, and an increased sense of male responsibility for contraception (Anglin, 1988; Dryfoos, 1985a,b; Earls, et al., 1989; Edwards, Steinman, Arnold, & Hakanson, 1980; Hayes, 1987; Kirby, 1985; Rickert, Gottlieb, & Jay, 1990; Robert Wood Johnson Foundation, 1986; St. Paul Maternity and Infant Care Project, 1985; Zabin, Hirsch, Smith, Strett, & Hardy, 1986). These health centers provide primary medical care,

health promotion, and nutrition education as well as sex education, birth control information and services, and prenatal care. School-based health services have been reported to be highly utilized and low cost (Millstein, 1988) but evaluations of this new delivery system are yet limited.

Determining student need. There should be yearly screenings for general health, weight, healthy life style (smoking, weight, aerobic fitness, sexual activity). In addition, access to health care should be determined for each student. Formal testing on healthy living habits should also occur. Identified problems (e.g., lack of immunization, unhealthy habits, lack of access to treatment) would be addressed on an individual basis.

Short-term measures. Yearly measures of health status, pregnancy rates, smoking rates, fitness, access to health care, student health care utilization rates, and knowledge of good health practices (nutrition, contraceptive use and sexually transmitted disease, smoking and drinking risks).

Long-term measures. Same as above plus completion of school, and post-school status.

Counseling/Treatment Programs

Service description. Many more youth than those labeled SBD have the need for formal counseling and treatment programs (Liaison Bulletin,

1990). These include career, employment, and guidance counseling to help students plan their futures and cope with family, peer, and school problems. The interrelations between poor school performance, disruptive school behavior, and delinquency are well documented (Farington, 1980; Hindelang, Hirschi, & Weis, 1981; Kelly, 1980; Pink, 1982; Wright & Jesness, 1981).

Intensive drug and alcohol treatment programs are seldom available to students. This is a national problem, and others have underscored the widespread need for drug and alcohol treatment on demand (Ford Foundation, 1989) for all Americans, but especially as part of a serious investment in youth. Students must have access to counseling and treatment services prior to and throughout their secondary programs to increase their retention and success in school (Lichtenstein, 1989; Weber, 1986).

For some students with acute emotional/behavioral problems day treatment, semi-residential (ReEd Model), or residential programs are needed. These programs provide intensive educational, mental health, and family support services in controlled settings.

Determining student need. There should be a yearly screening of all students to identify those with counseling/treatment needs (e.g., personal counseling, drug/alcohol counseling, family support). Students identified as at-risk should be referred to a

multidisciplinary team composed of school and community agency personnel in order to determine specific needs and treatment options.

Short-term measures. Yearly screening data on each student. Summary of treatment needs and treatment utilization for each assessed student. Treatment outcome data. Mental health status summary.

Long-term measures. Mental health status, treatment needs/ utilization, and ongoing support needs.

Extended Week/Year Programs

Service description. Students who find school unreinforcing, who do poorly, who are not athletic, who come from dysfunctional families, or who associate with gangs are at risk for engaging in antisocial, or at the least nonproductive, activities after school, on weekends, and during summer break. For less advantaged students the summer months can interrupt hard won progress and present major distractions and idle time. A recent study (Agnew & Petersen, 1989) of 600 urban adolescents indicates that delinquency is positively related to time spent in unsupervised social activities and leisure activities with peers (e.g., "hanging out," dating, parties). Low achieving students are more likely to fall in with a negative peer group, which can not only interfere with school attendance or activities, but can also influence a student's attitudes and values about school. Supervised recreational programs, therapeutic wilderness camps (e.g., Outward Bound), tutoring sessions, mentor experiences, and appropriate work placements during

evenings, weekends, and the summer months are needed for many students whose families are unable to provide enrichment experiences. These programs can also offer opportunities for students to be with peers in activities that increase skills and broaden experience. Increasing time spent in school or related activities has the potential to increase academic performance (Peng, Owings, & Fetters, 1982) and decrease antisocial behavior.

Determining student need. An analysis of out-of-school student activities would be conducted to determine social/recreational activities, jobs, and prosocial contacts. Specific attention would be given to student activities that are inappropriate, interfere with schooling (inappropriate work schedule), or result in isolation or loneliness. An "out-of-school activity plan" would be developed to increase prosocial group bonding through sports, outdoor, craft, and computer activities, work internships, and tutor programs.

Short-term measures. Records of prosocial group contacts, antisocial group contacts, periods of isolation, student satisfaction.

Long-term measures. Student reports of prosocial group involvement.

Mentors/Benefactors

Service description. It is unrealistic to believe that schools can solve the multiple problems of adolescents with special needs in our society without assistance from their local communities, businesses,

universities, and other resources (Kean, 1989; Liaison Bulletin, 1990). There are some data indicating that opportunities for informal adult-student interaction are particularly beneficial for disadvantaged and at-risk youth in reducing dropping out and absenteeism (Bryk & Thum, 1989; Comer, 1988; McDill, Natriello, & Pallas, 1986; Rumberger, 1987; Wehlage, 1983), in reducing problems with drugs, work, health, and family (Newcomb & Bentler, 1988), and in assisting students as they make the transition from school to adult life (Zetlin & Hosseini, 1989).

A significant finding of the Kauai Longitudinal Study (Werner, 1989) was that access to emotional support outside their families characterized resilient high-risk high school students. These external supports included neighbors, teachers, or elders who served as role models, friends, and confidants. In her analysis of social programs that work for high-risk children, Lisbeth Schorr (1988) identified key attributes of successful programs, one of which is the involvement of professionals who are perceived by youth as "people who care about them and respect them, people they can trust" (p.258). Or, as Urie Bronfenbrenner has observed, "every child deserves to have at least one adult who is crazy about them." A formal program of matching mentors and students is needed.

Determining student need. Student, parent, and teacher interviews could be used to identify students without mentors. These interviews need to be conducted on a yearly basis.

Short-term measures. Frequency counts of students without at least one mentor. Number of successful mentor matches. Descriptive data on successful student/mentor matches and activities. Student/mentor satisfaction.

Long-term measures. Frequency counts of students without mentors. Count of successful student/mentor matches, satisfaction of students/mentors. Qualitative studies of mentor experience.

Family Support Programs

Service description. More is demanded of parents of students with mild handicaps than parents of nonhandicapped students in the way of assisting with school work, choosing appropriate programs, advocating for services, and coping with the stresses of adolescence. These demands can often overwhelm the well educated middle-class parent, let alone parents of the large number of these students from disadvantaged and minority backgrounds. Many parents face major obstacles in preventing their child's exposure to harm and promoting positive health and developmental outcomes (National Center for Children in Poverty, 1990).

Parents may need a wide range of supports in order to become effectively involved in their child's schooling. These may include adult basic education for disadvantaged or minority parents who have not received their diploma, or English classes for non-English-speaking parents. Other parents may need training to help their child with

homework or to understand the special education system. Another approach is to establish an agreement between parents and school staff about parent obligations to set appropriate school expectations for their child (e.g., regular punctual attendance, check if student assignments are completed) (Epstein, 1987; Kelly & Smrekar, 1987; Levin, 1988). Research indicates that parents' educational aspirations, monitoring of schoolwork, general supervision, and communication with the child are related to school achievement, including students' grades, attendance, attitudes, and expectations (Astone & McLanahan, 1989). Many parents need help in order to provide these supports to their children.

These family supports must take into account the nearly half-million teenagers who become parents. The teenage mother is less likely than her peers who delayed parenthood to have a high school diploma, and is more likely to have such low-level basic skills that she is able to get only low-paying jobs. An increasing proportion of these mothers are unmarried. As single parents without adequate economic resources or the hope of succeeding in a job, these mothers are likely to experience high levels of stress and depression. They have a high need for parenting supports to become self-sufficient. Both teen mothers and fathers need basic and remedial education, job training, parenting training, access to role models and emotional supports, child care, health care, housing, and transportation assistance (Children's Defense Fund, 1986; Colletta, 1981; Zitner & Miller, 1980). Those who balk at providing teen parents with these supports fail to consider the

alternative of long-term poverty and risk of dysfunction (i.e., child abuse, substance abuse) these families face. Schools need to engage in collaborative efforts to organize these resources for teen parents.

For some families, support must be provided in securing basic needs such as housing and food. For the thousands of homeless families these needs are paramount. Many of these families are forced to make frequent moves which often disrupt schooling and other support services. These children are unable to find any stability in their lives. Friendships are difficult to maintain and there is little continuity to their lives. Changing schools several times during a year makes any semblance of a comprehensive educational program a sham. The experiences of migrant children are such a case in point. Many nonmigrant children also experience frequent uprootings and discontinuity of their lives. Coordination of housing services, educational, and other support services for this highly mobile population is needed.

For other parents severe personal problems, mental illness, and drug or alcohol addiction may seriously interfere with their ability to parent. For these families comprehensive community services are absolutely crucial if their children are to be successful students.

Determining student (family) need. Yearly screening by school personnel of overall family needs (health care, GED, ESL classes, counseling/treatment, vocational placement, respite services, housing,

food, parenting skills, social support). Families identified as potentially in need of any service need to be referred to a community-based case management service. The case management service will prepare a comprehensive Individualized Family Service Plan (IFSP). The case management service will monitor all needed service interventions.

Short-term measures. Summary of screening data, summary of IFSPs. Frequency count of families receiving needed services, outcomes of services. Survey data on patterns of parental supervision and parent/child communication patterns (Astone & McLanahan, 1989). Overall rating of family functioning.

Long-term measures. Frequency count of families receiving needed services, service outcome measures, overall family functioning measure.

Options for Out-of-Family Living

Service description. The current child welfare philosophy in the United States is to keep the family intact at all costs, often at the expense of the child. As the authors of the William T. Grant report (1988) on youth emphasize, however, reasonable efforts to preserve families require reasonable supports to ensure the child's protection, such as Homebuilders and other intensive, comprehensive programs.

Until adequate resources are allocated to fund effective family preservation programs, there should be formal options for the adolescent student to be placed out of the family when the home

environment carries with it the risk of serious harm for the child. The William T. Grant report (1988) also describes several models to help adolescents in foster care prepare for transition to independent living through supervised training and education (pp.111-112).

Determining student need. Each student's IFSP should document if the student is at risk if he/she remains in the home. Risk status should reflect the family's ability to meet the student's basic needs. This analysis should be conducted on a yearly basis.

Short-term measures. Frequency count of families' abilities to meet student needs, frequency of out-of-home placements, appropriateness of out-of-home placement.

Long-term measures. Frequency count of families able to meet student needs, frequency of out-of-home placements, appropriateness of out-of-home placements. Satisfaction with placements.

Multicultural Orientation

Service description. In many districts a high percentage of mildly handicapped students are members of ethnic minorities. Educational systems most often reflect the interests of the majority group, and classroom and administrative procedures are often insensitive to the values of minority groups. A multicultural approach that promotes human rights and social justice for all people is needed. This approach would include classroom curricula as well as administrative

procedures that promote increased cultural pluralism. In their review, Sleeter and Grant (1987) point out the need for efficacy research on the diverse and untested multicultural approaches and curricula.

Cummins (1986) has outlined more global strategies for promoting minority student empowerment and school success, including promotion of students' language skills, community participation in developing academic and cultural resources for students, and instructional strategies that foster independent learning. He cites several models (Campos & Keatinge, 1984; Tizard, Schofield, & Hewison, 1982) for successful parent, teacher, and community collaboration with a multiethnic, minority student population. The programs were characterized by teacher willingness to involve minority parents or aides in instruction, and the reinforcement of students' cultural identity and native language. Planning effective programs and alternative tracks for mildly handicapped students demands involving the parents of minority students and coordinating services with their community leaders. Comer (1985) and others (Walberg, 1984) have reported the positive effects on students of parent involvement in school governance, setting academic goals, and planning home learning sessions.

Determining student need. An analysis of dominant learning style and appropriateness of cultural content of curriculum, role models, and language should be conducted for each student on a yearly basis. Survey of minority parent needs and preferences for school involvement.

Short-term measures. Match of student needs to available options. Third-party evaluation of cultural appropriateness of school programs and administrative procedures. Student/family satisfaction measures.

Long-term measures. Third-party evaluation of student status. Student/family satisfaction.

Placement Services

Service description. Students traditionally exit from the public school system by earning a diploma. Additional transition services they receive may include career or college admission counseling. Current special education practice also includes transition planning and the development of an Individualized Transition Plan (ITP). These ITPs usually are a plan (a noun), rather than a process (a verb). These plans often are not implemented due to lack of available services and/or lack of follow through by agency staff, parents, or student.

An alternative to transition planning is placement. Using our proposed exit criteria, each exiting student would be placed in a setting (either employment or post-secondary training) with the necessary support systems. School personnel would make the placements, coordinate needed support services from existing community services, provide direct or placement support to the students, and coordinate with the community case management services. Students would not "graduate" from school, even if graduation requirements are met, until successful placement is achieved. The IEP would include the criteria

of successful placement, and thus school funds could be used to pay for these services until the student turns 21 or a successful placement is achieved.

Determining student need. Appropriate post-school placement would be determined through the IEP process (school, student, family, community agency input). Specific placement and ongoing support services (e.g., tutor, mentor, transportation, job coach, etc.) would be specified along with graduation criteria (e.g., successful job placement for six months, successful completion of one quarter/semester in a post-secondary training setting).

Short-term measures. Description of placement option, list of ongoing support services.

Long-term measures. Records of successful placements and graduation. Long-term job/education retention and advancement. Student/family satisfaction.

Overall Case Management

Service description. The array of human service agencies which now provide support to individuals in need is complex and unorganized. Eligibility criteria, access procedures, and lack of coordination inhibit use of available services. The management of these services is often beyond the ability of many individuals.

Case management is designed to help individuals access and coordinate services. A knowledgeable case manager helps a family develop an overall, interagency service plan, and monitors the delivery of services. Case management services are mandatory for families experiencing multidimensional problems (House of Representatives, Select Committee on Children, Youth, and Families, 1989). However, the recent proliferation of case management services has resulted in some families being assigned two or three case managers, creating the need for someone to manage the case managers. Also, some agencies are using their resources to provide case management rather than services. As a general rule, case management should follow, rather than precede, service development. A coordinated case management service is a necessary component in a comprehensive service system.

Determining student need. As part of the development of the Individualized Family Service Plan, a case manager would be identified for each family.

Short-term measures. Case manager assigned, needed services delivered, service outcomes, family satisfaction.

Long-term measures. Case manager assigned, needed services delivered, service outcomes.

Design Considerations

Developing research designs appropriate for the study of post-school outcomes for mildly handicapped youth demands attention to a number of considerations. We are generally advocating for a multifaceted or broad-based intervention approach (Kazdin, 1987). In this approach a number of specific interventions are applied to the problem. To be effective, this model must meet certain criteria. First, each intervention must have some evidence of impact on the specific problem to be addressed. Second, there must be some evidence that the problem being addressed relates to the overall desired outcome (i.e., school success). Thus, if we propose that the student's general health status is related to the student's ability to experience an overall satisfactory lifestyle, we must be careful to delineate specific aspects of health that relate to satisfactory lifestyle. Our health intervention (be it immunization, sex education, or aerobic status) must be demonstrated to have a positive impact on health. This may appear to be self-evident, yet empirical demonstration of both relationships (i.e., healthy status contributes to satisfactory lifestyle, and sex education leads to healthy status) must be documented.

While we have attempted to provide a rationale for such relationships for the proposed interventions, we acknowledge that the rationale for some interventions are based to a large extent on face validity rather than empirical evidence. One purpose of the short-term research

efforts is to demonstrate that the interventions can achieve short-term outcomes, thus strengthening the evidence for the discrete components.

In order to document the impact of the interventions on specific outcomes, attention needs to be given to population characteristics and treatment specifics. Again, using criteria specified by Kazdin (1987), these research requirements are as follows:

- Population descriptors. Child descriptors should include age, IQ, handicapping condition, gender, ethnicity, geographic setting, and a status rating on each treatment domain (e.g., mentors, health, out-of-school activities, peer groups). Status ratings are addressed in each section on determining student needs. Family characteristics also need to be specified, including family unit (1-2 parents, siblings, extended family members), ethnicity, income level, educational level, and overall family functioning. These population characteristics are important in determining the amenability of specific individuals to the various treatments.

- Treatments. Treatments need to be conceptualized in terms of the causes of specific problems, and the specific aspects of treatment that address these causes. Thus, in the area of in-school case managers, we conceptualize that a caring, involved adult, who is interested, on a daily level, in the student's life is an important social support for all students. Students who lack access to such an individual are more likely to feel

isolated, alienated, uncared for, unmotivated, and to stop attending school. An in-school case manager addresses this specific problem (i.e., lack of support).

Treatment procedures must specify who is eligible for which treatment, and how treatments are delivered (Kazdin, 1987). Thus, all interventions need to be documented with written procedures so that the decision rules are explicit and the treatments can be replicated in future research.

Documentation of treatment population characteristics and specific treatment procedures is important for all research in this area; for broad-based interventions it is absolutely critical. The major challenge presented by the broad-based intervention model is to identify which component accounted for the observed change (outcome). On the other hand, the limitation of the predominant single-intervention approach is the failure to find a powerful (effective) intervention. Our bias at this time is to undertake selected carefully designed multifaceted interventions, evaluate changes, and then (later) tease out the relative contributions of each intervention.

Statistical Analysis

The statistical analysis of these multidimensional intervention programs will present a challenge. Traditional multivariate analysis techniques are probably not adequate for such designs. Modeling (LISREL, Partial Least Squares) is one alternative that has been

advocated to address these designs. These procedures call for developing a model which predicts causal relationships between subject characteristics (e.g., handicapping condition, SES), interventions (e.g., extended day program), and outcomes. For example, when dealing with a highly multivariate data base such as the one we are proposing, Wold (1982) has proposed Partial Least Squares (PLS) analysis. Using this technique a model is developed, demonstrating sets of variables which interact to produce an outcome. Each latent variable represents a dimension underlying the indicators of that variable that is predictive of the outcome. This latent variable is intended to explain the cross-correlations between the indicators and the outcome measure.

Although we are not recommending what statistical procedures should be used to document intervention effectiveness, we question whether the proposed studies are amenable to traditional quantitative analysis procedures. We hope such procedures can be developed, but we also believe qualitative methods should be employed (Goetz & LeCompte, 1984; Lincoln & Guba, 1985). Researchers will need to consider novel evaluation procedures in order to adequately study these multidimensional intervention programs.

Three-year projects. Although the major questions to be answered, by definition, require longitudinal study of 4-8 years, some questions can be addressed in short-term (3-year) studies. For example, one question for short-term study is whether placement services alone achieve the desired outcomes. All of the other support services could likewise be

studied for their short-term impact. However, we caution readers that long-term study is essential, because if short-term but not long-term benefits are found, the success of the interventions is questionable. Table 1 summarizes 3-year (short-term) and 6-year (long-term) outcome measures for each component.

Table 1

Summary of Support Components and Outcome Measures

Supports	Short-Term Measures	Long-Term Measures
In-school case manager	•Case manager assigned •Frequency of contacts •Student satisfaction •Attendance	•Completion of school •Successful placement •Student rating of case manager
Health services	•Health status measure •Access to health services •Knowledge of health practices •Student satisfaction •Attendance	•Completion of school •Successful placement •Health status •Access to health services
Counseling/treatment programs	•Mental health status •Access to counseling/treatment •Treatment outcomes •Attendance	•Completion of school •Successful placement •Mental health status •Access to counseling/treatment
Extended week/year programs	•Prosocial group contacts •Student satisfaction •Attendance	•Completion of school •Successful placement •Prosocial group contacts •Student satisfaction
Mentors/benefactors	•Student/mentor dyad •Student/mentor satisfaction •Attendance	•Completion of school •Successful placement •Student/mentor connection •Student/mentor satisfaction

Table 1 (cont.)

Supports	Short-Term Measures	Long-Term Measures
Family support programs	•IFSP summary •Family functionality •Access to services •Attendance	•Completion of school •Successful placement •Family functionality •Access to services •Family satisfaction
Options for out-of-home living	•Out-of-home placements •Appropriateness of out-of-home placements •Attendance	•Completion of school •Successful placement •Out-of-home placement •Appropriateness of out-of-home placement •Student satisfaction
Multicultural orientation	•Third party evaluation •Student/family satisfaction •Attendance	•Completion of school •Successful placement •Third-party evaluation •Student/family satisfaction
Placement services	•Statement of placement option and on-going support services •Attendance	•Completion of school •Successful placement •Student/family satisfaction
Case management services	•Case manager assigned •Needed services delivered •Service outcomes •Family satisfaction	•Completion of school •Successful placement •Case manager assigned •Services delivered •Service outcomes •Student/family satisfaction

Six-year projects. In theory, any one of the support services could be studied on a long-term basis using both the proposed short-term and long-term measures. However, to reiterate, we believe mildly handicapped youth face multidimensional problems that require multiple interventions.

Because most of the support programs are not widely available, before they can be expected to augment improved instructional strategies, they must be carefully planned and studied. This includes delineating intervention strategies, agency coordination, implementation procedures, process evaluation components, and outcome measures. Clearly not all students will need all services; on the other hand, all services will be needed for some students. Thus a needs assessment procedure for students must be developed.

Evaluation concerns will dictate how services should be implemented. We doubt we will obtain adequate data on which to base decisions if one project evaluates only one component, like health services, and another project evaluates only extended-year programs. Student support needs are often so complex and great that it is unlikely that any single program will be demonstrated to be effective.

We therefore propose that saturated models be implemented and studied. This approach is based on the Comprehensive Child Development Center initiative currently being evaluated by the Administration on Children, Youth, and Families (ACYF) of the Department of Health and Human

Services. In this project some 25-30 programs across the country have been funded to provide a full range of health, education, employment, and support services to low-income families with children under one year of age. One cohort of families will receive comprehensive services over a five-year period, with the major dependent variable being the child's functioning in kindergarten. Controls will receive regular services. Researchers will determine if there are differences between groups, with more positive child and family outcomes when all family needs in one group are addressed. Cost effectiveness of providing a full range of integrated services will also be evaluated by an independent contractor. If the program fails and comprehensive services do not result in very positive child and family outcomes, then it will be back to the drawing board and a reconceptualization of intervention.

We believe a similar effort is called for in relationship to mildly handicapped secondary students. Since the desired student outcome is successful post-school adjustment, the interventions must be of sufficient intensity and duration so as to have an impact on educational, employment, and social outcomes. A contrast group must be identified and resources allocated to study their experiences and outcomes. The research studies must be longitudinal to adequately document these outcomes.

Required resources. These programs clearly cannot (and should not) be funded with existing resources. The simple fact of the matter is that

these services will require additional (much more) funds. We believe the Comprehensive Child Development Program can also serve as a model for funding this initiative. Projects requesting funding would first establish interagency agreements with local and state agencies, obtaining an agreement to insure access to all available services for the students and families. An analysis of missing but needed services would be conducted. Projects would receive federal funding to develop missing services, as well as pay for existing services that are not currently provided free of charge by existing agencies. Using this model all needed services would be provided, either by existing community agencies, or by the development of new services for the students or their families.

The research design would attempt to answer a series of questions: 1) which (and how many) students and families need which services; 2) do the services achieve the desired short-term outcomes; 3) do the services achieve the overall desired long-term outcomes; and, 4) what is the cost of such services. If the overall benefits are achieved, policy makers can then decide how to allocate funding to make services widely available. If the desired outcomes are not achieved, a new strategy must be developed.

Adequate (and we realize this will be massive) resources are needed to give this approach a fair chance of succeeding. The problems facing youth and families living in poverty are complex and overwhelming. Schools, too, are overwhelmed by these factors. Radical measures are

called for to solve these problems. Piecemeal attempts are not proving effective and, in fact, may be a waste of resources. We need to attempt comprehensive, saturated interventions and systematically evaluate their effectiveness.

There is little argument that mildly handicapped students exhibit escalating problems throughout their schooling experience. Early adolescence represents a critical turning point in development (Dusek, 1987; Jackson & Hornbeck, 1989; Simmons & Blyth, 1987); therefore, interventions need to be put in place at least by the middle-school years. Thus research projects will need to run for 4-8 years. Intensive process evaluation, ongoing specific outcome evaluation, and final outcome evaluation need to occur. We recommend that a major qualitative evaluation component be included with standard quantitative procedures. Qualitative inquiries could be undertaken, for example, to study those adolescents who are able to overcome their learning problems and life circumstances to successfully adapt to adult life. This information could have implications for future interventions (Hamburg & Takanishi, 1989).

Further, although highly specific research and program evaluation are needed to identify program components related to eventual outcomes, we believe all special education programs must collect basic outcome data on the students served. A national data base of common outcome measures would establish a baseline for specific research and

evaluation projects. The SRI (Wagner & Shaver, 1989) longitudinal data base is the only such existing effort.

Major Challenges and Limitations

It would be naive to think that this agenda will be easily accepted or implemented. We can foresee many objections that may be raised, and potential limitations to the interventions. These will demand further study and efforts on behalf of others in the field.

- Limited national resources. Our society may choose not to allocate the necessary resources to serve this low-status group of students in the context of an increasing deficit, military expenditures, and no new taxes.

- Needs of the changing U.S. economy. In our society economic rewards and advantage are tied to educational opportunities. Unequal positions in our economy need to be filled, and to date the disadvantaged, minority, vocational-track students have supplied the manpower for lower paying positions. EHA to date has not provided mildly handicapped students with the entitlements they would need to be afforded a truly equal educational opportunity. We now find ourselves in an increasingly service-oriented economy. A call for increased entitlements for these students is not likely to be popular at a time when market forces are allowed to solve social problems (Anderson & Hula, 1989).

• The growing underclass. The poverty level and size of the underclass in our country are growing, with corresponding increases in the number of at-risk students and their degree of disadvantage (Levin, 1989). The proposed educational and environmental supports may simply be too weak to overcome the effects of profound and intergenerational poverty, including the loss of hope. Moreover, the current conservative political climate may not tolerate interventions which smack of entitlements for this growing segment of society.

• Dysfunctional families. The role of the family in providing support and adult models for children cannot be overestimated. The lack of strong underlying family support systems and the severity of family dysfunction (i.e., increasing poverty) may overpower the proposed interventions.

• Problems associated with adolescence. Adolescents engage in a variety of problematic behaviors -- questioning authority, engaging in risk-taking behaviors, seeking peer approval, experimenting with drugs and sex -- which our proposed interventions may not be powerful enough to influence.

• Professional turf issues. Many educators believe that the role of education is to focus only on educational strategies and to leave noneducational issues to other human service agencies. Although they may acknowledge that other services are necessary,

they believe schools should not play a leading role in advocating nor providing such services. Any attempt to extend the range of interventions delivered in the educational setting may be met with resistance to commit educational resources for these noninstructional support programs.

• Prevailing view of education as a cure. The prevailing view in educational circles (both regular and special) is that education can provide students with a repertoire of skills that will enable students to "pull themselves up by their bootstraps" and rise above their environmental circumstances. In contrast to the chronic disease model, the cure model searches for interventions that will "fix" the student or inoculate him or her against environmental factors which inhibit success. Those who adhere to the cure model are reluctant to intervene in noneducational factors, often describing these factors as not amenable to intervention.

Conclusion

We believe that special education programs will never provide equal educational opportunities for all students with mild handicaps unless a major restructuring of the educational system occurs. This restructuring includes curriculum, instructional procedures, and support services. Simply adding on isolated programs to the current system is destined to fail, regardless of the quality of the individual service components. Rather than continue to expect incremental program

changes to result in student success, we recommend a study of major changes in supports that appear promising to enable secondary students to face social and economic realities.

Our choice of support services was based on preliminary positive findings from the sociological, public health, social work, and psychological research literature, as well as our own perceptions of problems in the transition process that call for innovative approaches (i.e., placement services). Our hypothesis is that these environmental supports can play a crucial role in successful adult outcomes for these students. We believe that the study of these environmental factors will yield at least equal, if not more powerful, information than traditionally gleaned from the study of educational intervention factors. And although this paper does not address curriculum issues, we reiterate that a combination of educational intervention and environmental support is needed to achieve our overall outcomes.

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